



DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE

FEDERAL FISH AND WILDLIFE PERMIT

1 PERMITTEE

PATRICK T. WHALEN
1515 N. COAL ROAD
COLCHESTER, IL 62326

2 AUTHORITY-STATUTES
16 USC 1539(a)

REGULATIONS
50 CFR 17.22

50 CFR 13

3 NUMBER
TE17700A-0

4 RENEWABLE
YES
NO

5 MAY COPY
YES
NO

6 EFFECTIVE
02/03/2012

7 EXPIRES
02/28/2042

8 NAME AND TITLE OF PRINCIPAL OFFICER (If not a business)

9 TYPE OF PERMIT

NATIVE ENDANGERED SP. HABITAT CONSERVATION PLAN - E
WILDLIFE

10 LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED

Whalen Residence, 1.26 acres, 16327 Perdido Key Drive, Pensacola, Escambia County, Florida.

11. CONDITIONS AND AUTHORIZATIONS.

A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK 22 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY OR RENEWAL OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS.

B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL, TRIBAL, OR OTHER FEDERAL LAW.

C. VALID FOR USE BY PERMITTEE NAMED ABOVE.

Also valid for use by permittee's authorized agents.

D. Acceptance of this permit serves as evidence that the permittee and its authorized agents understand and agree to abide by the terms of this permit and all sections of title 50 code of federal regulations, parts 13 and 17, pertinent to issued permits. Section 11 of the endangered species act of 1973, as amended, provides for civil and criminal penalties for failure to comply with permit conditions.

BLOCK 11 OF THIS PERMIT CONSISTS OF CONDITIONS A - S (10 PAGES TOTAL) AND APPENDICES A AND B (4 PAGES TOTAL).

ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY

12 REPORTING REQUIREMENTS

Reports will be provided to the U.S. Fish and Wildlife offices appearing in Conditions 11.R and S of this Permit.

ISSUED BY

TITLE

DEPUTY REGIONAL DIRECTOR

DATE

02/03/2012

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- E. The Permittee owns a 1.263-acre tract as described in Block 10 above, and proposes to construct a single family residence ("the Project"). This Permit authorizes the incidental take of the Perdido Key beach mouse, *Peromyscus polionotus trissyllepsis*, (PKBM) associated with the construction of the Project and associated infrastructure, and subsequent human habitation of the Project, as detailed in the Habitat Conservation Plan (HCP) submitted in the ITP application and further conditioned herein and subject to the continued validity of the Permit.
- F. The Permittee will manage and maintain the Project site during and after construction of the Project. The Permittee shall incorporate as deed restrictions this Permit and all terms and conditions of this Permit and be recorded in the records of Escambia County, Florida in accordance with Florida law. The Permittee shall be defined as Patrick T. Whalen.
- G. At such time as the Permittee shall sell or dispose of all his respective interest in the Project and so long as the Permittee is not then in default under this Permit, the Permittee shall be automatically released from all obligations, conditions, and liability of this Permit and any purchaser of the Project shall, upon purchase thereof, become responsible for the future compliance therewith but not for any prior or then existing defaults, violations, or deficiencies.
- H. Subject to the terms and conditions of this Permit, the Permittee is authorized to engage in the following forms of take of the PKBM incidental to the site preparation, development, construction, operation, and human occupancy of the Project Site, including the house, parking, and driveway.
- Harassment, harm, injury, and/or death of PKBM resulting from the permanent loss of 0.18 acre of habitat, including critical habitat on the Project site and for take resulting from indirect impacts due to the development, construction operation, and human occupancy of the Project Site.
- I. Within ninety (90) days after the effective date of this Permit and the date on which Permittee receives the fully executed Permit from USFWS, the Permittee shall ensure that this Permit and all terms and conditions of this Permit are recorded as deed restrictions for the property in the real estate records in Escambia County, Florida. A copy of the recorded deed restrictions shall be sent to the U.S. Fish and Wildlife Service within thirty (30) days of the deed restrictions being recorded.
- J. The deed restriction shall further stipulate that no changes shall be made to the recorded deed restrictions that would cause noncompliance with the requirements of this Permit. Dissolution constitutes grounds for suspension or revocation of the

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J. (Continued).

Permit and may subject the Permittee to enforcement action.

- K. The Permittee shall maintain a copy of the Permit in the residence for use by the residents, renters, lessees, or others.
- L. The Permittee shall allow personnel of the U.S. Fish and Wildlife Service, State of Florida Fish and Wildlife Conservation Commission, Escambia County, or other properly permitted and qualified persons designated by these agencies to enter the Project boundaries at reasonable hours and times for the general purposes specified in Part 50 Code of Federal Regulations §13.21(e)(2).
- M. The following measures must be employed by the Permittee to ensure that take of the PKBM is minimized and fully mitigated:

Construction (and site preparation)

1. All construction on the beach shall be conducted outside the sea turtle nesting season (May 1 through October 31).
2. A copy of the Permit shall be provided to the general contractor and included in all sub-contracts for the Project. The construction contract documents entered into by the Permittee shall include a stipulation that conservation objectives of the Permit shall be communicated to and agreed upon by all sub-contractors.
3. During construction, impacts to PKBM shall be avoided or minimized by: (a) placing sediment barriers and flagging to restrict access and avoid impacts to habitat; (b) storing materials at appropriate staging sites and on previously disturbed areas outside of PKBM habitat; (c) keeping the construction site clean and free of debris, keeping trash out of habitats; (d) limiting disturbance from site preparation and construction grading by clearly indicating on all construction plans and onsite with silt fence or other barrier fence installation. The foregoing are subject to the provision in paragraph 4 below allowing for temporary disturbance of an additional 10 feet outside the Project footprint.
4. Permanent alteration of the Project site shall not exceed 0.18 acre (structure /parking/driveway) for the Project footprint. An additional 10 feet outside of the 0.18 acre project footprint may be temporarily disturbed during site demolition, site preparation, and Project construction. The 10-foot area outside of the footprint will be restored upon completion of the construction.

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M. (Continued).

5. All exterior and interior lighting for the Project shall conform to the specifications outlined in Appendix A – Project Lighting Restrictions for Conservation of Protected Species.
6. All of the Project's components (e.g. house footprint, parking area, driveway, deck, and dune walkover) constructed shall conform to the configuration/design plans as specified in the HCP.
7. The dune restoration and project landscaping shall incorporate the following:
 - a) all vegetation planting must be completed by May 1 of each year;
 - b) all vegetation planted would be from the indigenous plant list, Appendix B - Species Plant List for Coastal Dune and Beaches in Escambia County, Florida. Changes to the plant list shall be considered upon written request; request for changes shall provide information that provides verification that the plant is a coastal native dune plant species in Escambia County, Florida;
 - c) irrigation of planted dune vegetation would be by backpack or handheld sprayers only;
 - d) all dune restoration material would meet State of Florida requirements for beach quality material;
 - e) the use of mulch and landscape fabric is prohibited on the Project site areas.
 - g) the dune restoration and landscape plans must be approved by the Service; the plans shall be provided to the Service for review no later than 120 days prior to restoration or landscape installation.
8. Undeveloped areas along the east and west sides of the building shall be maintained post-construction to provide connectivity of PKBM habitat to other onsite and off-site habitat. These areas will be a minimum of 10 feet wide and any plantings shall be native vegetation selected from the indigenous plant list in Appendix B - Species Plant List for Coastal Dune and Beaches in Escambia County, Florida.

One dune walkover shall be constructed, as the only access to the beach, using top-down techniques on raised pilings a minimum elevation of 4 feet above grade to allow natural dune growth and formation.
9. During construction a barrier shall be installed along the property boundaries to prevent access to beach mouse habitat by pedestrians and allow movement of beach mice. All debris/refuse shall be regularly removed from these areas with a minimum of disturbance to the natural vegetation.

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M. (Continued).

10. No permanent fences or privacy walls shall be constructed that would restrict beach mouse movements.

Monitoring

11. The Permittee shall, at its expense, be responsible for contracting with a qualified consultant to monitor the status of PKBM for two (2) years following issuance of the first certificate of occupancy by Escambia County, Florida covering any portion of the Project. The current monitoring requirement shall consist of yearly monitoring that consists of 4 (quarterly) trapping surveys conducted for 5 nights each. Site description and trapping data shall be recorded. Site description should include project location, habitat on the Project area and trapping design relative to habitat distribution. Daily trapping data should include number of beach mice captured per day, their sex, age, and reproductive condition, non-target species captured, weather conditions, lost or missing traps, and moon phase. Geographic position data shall be taken for every trap and mice capture location. A population estimate shall be calculated using the Program CAPTURE (Otis et. al 1978). Beach mice shall be individually marked to calculate a population estimate. The U.S. Fish and Wildlife Service shall approve of the trapping design. The design shall be submitted to the U.S. Fish and Wildlife Service at least 120 days prior to the start of the monitoring. Persons conducting the monitoring shall be required to obtain appropriate permits from the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission and shall follow the stipulations outlined in the permit(s). All information shall be provided in the annual reports for this Permit.
12. All house mice captured during monitoring surveys for PKBM shall be humanely euthanized and disposed of properly. Any cotton rats or cotton mice shall be released at capture point.

Operation and Maintenance

13. Cats (including pets) shall be prohibited from the exterior and interior premises of the Project. Dogs are permissible when kept confined inside the residence. Dogs may be walked on a 6-foot hand held leash outside of beach and dune areas. All dog solid waste material must be picked up and disposed of properly by the pet owner/care taker.
14. The Escambia County animal control shall be contacted if free-roaming cats (pet or feral) are observed on the Project premises.

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M. (Continued).

15. Trash collection and storage shall be contained in the interior spaces. Exterior trash receptacles for trash pick-up would be animal-proof and would reduce predator and competition pressure from nuisance and exotic species.
16. Subject to temporary disturbance during construction as allowed by the terms of this Permit, permanent impact to the site shall be limited to the 0.18 acre as indicated in the HCP; land allowed by this Permit to be disturbed during construction and shall be restored after completion of construction. After Project completion 0.68 acre of PKBM habitat shall be protected, managed, and maintained on the Project site.
17. The applicant would establish a condition in the deed and restrictions of the property that requires restoration of sand and vegetation in the dune community after a named storm event, should such be lost or degraded if such areas are not otherwise restored by a governmental entity or other third party as part of an overall or isolated dune restoration program (such as, for example purposes only, the dune restoration program undertaken by state, federal and local government entities after Hurricane Ivan) and, provided that this requirement shall not interfere with or otherwise prohibit future participation in any such dune restoration program.
18. The use of exterior rodenticides and herbicides shall be prohibited. Any captured exotic or non-native rodents (house mice, Norway rats, black rats) shall be humanely euthanized and disposed of properly.
19. All beach chairs and umbrellas or similar items shall be removed from the beach on the Project each night during the sea turtle nesting season from May 1 through October 31.
20. A Conservation Easement with the Florida Fish and Wildlife Conservation Commission as the easement grantee shall be placed on the undeveloped portions of the Project with the exception of a 10-foot access easement associated with the walkover. The boundaries of the Conservation Easement shall be surveyed by a licensed certified land surveyor. The Conservation Easement shall be recorded with the Clerk of Escambia County within 6 months of the completion of the Project (first Owner occupancy). The Permittee/Owner shall work with the Florida Fish and Wildlife Conservation Commission to draft the Conservation Easement. A draft copy of the Conservation Easement shall be provided to the U.S. Fish and Wildlife Service for review and approval. A copy of the survey and recorded Conservation Easement shall be provided to the U.S. Fish and Wildlife

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M. 20. (Continued).

Service within ninety (90) days after the Conservation Easement is recorded.

21. As noted in the Permittee's HCP, the Permittee shall contribute a one-time sum of \$18,000 to the PKBM Conservation Fund held by Escambia County, Florida or such other entity as is designated by the U.S. Fish and Wildlife Service for such purpose. This contribution shall be provided with the application for a County Building Permit or other such permit that will result in impacts covered by the HCP. Following the issuance of the Certificate of Occupancy for the Project and every year following for the life of the Permit a fee of \$201.00 shall be deposited in the PKBM Conservation Fund. The purpose of the Fund is to implement compensation and mitigation of development impacts on PKBM.
22. Within ninety (90) days of the date of this Permit issuance, the Permittee shall provide the U.S. Fish and Wildlife Service a final site layout that shows the house, driveway, parking, and dune walkover. The dimensions as provided in this Permit shall be accurately depicted on the layout. The layout shall be no smaller in scale than 1 inch = 30 feet.
23. The Permittee/Owner shall place in escrow with Clark, Paddington, Hart et al., P.A., funds sufficient to finance 8 PKBM monitoring events at the property. The property deed restriction shall identify that this account cannot be dissolved under any circumstances until the monitoring surveys are completed.

N. The Permittee and the U.S. Fish and Wildlife Service agree that modification and amendments to the Permittee's HCP and this Permit may occur through the effective term of the Permit. The Permit is based upon the Permittee's expected compliance with the provisions and commitments established in the HCP and the stated terms and conditions set forth herein. Where a conflict occurs between the HCP and this Permit, the Permit shall control. The following procedures shall govern the modification and amendment process:

1. Either the Permittee or the U.S. Fish and Wildlife Service may propose modifications and/or amendments to the HCP or this Permit by providing written notice to the other. Such notice shall include a statement of the reason for the proposed modification and an analysis of its effects on the environment, the covered species, and operations under the HCP. This analysis shall be conducted jointly by the Permittee and the contact office of the U.S. Fish and Wildlife Service identified in Condition 11.R, below. The U.S. Fish and Wildlife Service or the Permittee will use best efforts to

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N. 1. (Continued).

respond to a proposed modification or amendment within sixty (60) days of receipt of such notice. Provided the U.S. Fish and Wildlife Service determines that such proposed modification or amendment would not result in any of the conditions identified in Condition 11.N.2, and absent any objection from the U.S. Fish and Wildlife Service or the Permittee, the proposed modification and/or amendment will be determined to be minor and will become effective upon written approval by the U.S. Fish and Wildlife Service.

2. The U.S. Fish and Wildlife Service will not propose or approve modifications or amendments to the HCP or this Permit if the U.S. Fish and Wildlife Service determines that such modifications would result in operations under the HCP and Permit that are significantly different from those analyzed in connection with the HCP, that would adversely affect the environment in new or significantly different ways than those analyzed in connection with the HCP or that would result in additional take of the covered species. If, for any reason, the U.S. Fish and Wildlife Service determines that a proposed amendment or modification is not minor, it must be processed in accordance with the U.S. Fish and Wildlife Service's permit regulations at 50 C.F.R. § 13 and § 17.
3. Any amendment or modification must conform with all applicable legal requirements, including but not limited to the Endangered Species Act, the National Environmental Policy Act, and the U.S. Fish and Wildlife Service's permit regulations at 50 C.F.R. § 13 and § 17.
4. The U.S. Fish and Wildlife Service reserves the right to amend this Permit for just cause at any time during its term in accordance with 50 C.F.R. § 13.23.

O. Unforeseen and/or changed circumstances may become apparent either to the Permittee, authorized agents or to personnel of the U.S. Fish and Wildlife Service. For the purposes of implementation of this condition, unforeseen circumstances are defined as changes in circumstances affecting a species or geographic area covered by the HCP that could not reasonably have been anticipated by the HCP developers and the U.S. Fish and Wildlife Service at the time of the HCP's negotiation and development, and that result in a substantial and adverse change in the status of the covered species. Changed circumstances are defined as changes in circumstances affecting a species or geographic area covered by the HCP that can reasonably be anticipated by HCP developers and the U.S. Fish and Wildlife Service, and that can be planned for. The process for addressing such

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O. (Continued).

circumstances will be governed by the U.S. Fish and Wildlife Service's policy regarding changed and unforeseen circumstances contained in the final "No Surprises" rule published on February 23, 1998 (63 FR 8859) and codified at 50 C.F.R. §§ 17.22(b)(5), 17.32(b)(5), 222.22(g). Provided, however, that should either unforeseen or changed circumstances arise, the Permittee and the contact office of the U.S. Fish and Wildlife Service will meet within twenty (20) working days following notice. The U.S. Fish and Wildlife Service and Permittee will together agree upon appropriate and reasonable measures for addressing such circumstances, within the rule of applicable law, and the Permittee will implement appropriate and reasonable measures within an additional thirty (30) working days, unless a longer period of time is agreed to by the U.S. Fish and Wildlife Service.

- P. Reports submitted in compliance with this Permit must include the following certification from a responsible official who supervised or directed the preparation of the report:

"Under penalty of law, I certify that, to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of this report, the information submitted is true, accurate, and complete."

- Q. Upon locating a dead, injured, or sick individual of an endangered or threatened species, initial notification must be made to the U.S. Fish and Wildlife Service Law Enforcement Office, Clermont, Florida at 352/429-1037 within 24 hours. Additional notification must be made to the U.S. Fish and Wildlife Service's Field Office at Panama City, Florida at 850/769-0552 within 48 hours. Care should be taken in handling sick or injured individuals and in the preservation of specimens in the best possible state for later analysis of cause of death or injury.

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- R. For purposes of monitoring compliance and administration of the HCP and the terms and conditions of this Permit, receipt of reports, and review and approval of site plans, lighting plans, landscape and dune restoration plans the contact office of the U.S. Fish and Wildlife Service is:

Field Supervisor
U.S. Fish and Wildlife Service
1601 Balboa Avenue
Panama City, Florida 32405
Telephone: 850/769-0552
Facsimile: 850/763-2177

- S. Reports and any other correspondence generated from implementation, modifications, or administration of the Permit shall also be provided to the following office of the U.S. Fish and Wildlife Service:

Section 10 Permit Coordinator
U.S. Fish and Wildlife Service
1875 Century Boulevard, Suite 210
Atlanta, Georgia 30345
Telephone: 404/679-7313
Facsimile: 404/679-7081

END

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Appendix A

Project Lighting Restrictions for Conservation of Protected Coastal Species

To prevent adverse impacts to nesting and hatchling sea turtles, nocturnal movements of beach mice, and disturbance resting shorebirds, the minimal amount of exterior lighting for human safety and security shall be installed.

1. Lights shall not be placed within the developed footprint such that the light is visible outside the developed area.
2. Lights on dune walkovers or boardwalks shall not be located seaward of the landward toe of the dune (or its equivalent).
3. The light source or any reflective surface of a light fixture shall not be visible from any point beyond the developed footprint. There should be no illumination of any area outside the developed footprint, either through direct illumination, reflective illumination, or cumulative illumination.
4. Exterior wall light fixtures shall be either low pressure sodium lamps (LPS) or amber or red LED bulbs. The light fixtures should be completely shielded without interior reflective surfaces and directed downward. Lights may also be louvered and/or recessed, with black baffles or without interior reflective surfaces as appropriate and sea side shields.
5. Light fixtures shall be mounted as low as feasible to provide light where it is needed (i.e. patios, balconies, pedestrian paths). This can be accomplished through the use of low bollards, ground level fixtures, or low wall mounts.
6. Lights for purely decorative or accent purposes shall not be visible outside of the developed footprint and shall be limited in number and intensity. Up-lights shall not be used.
7. Roadway lighting shall use shielded low pressure sodium (LPS) lamps. The height and number of fixtures should be kept to a minimum and should be positioned and mounted in a manner such that the point source of light or any reflective surface of the fixture is not visible on the development outside of the developed footprint.
8. Lighting in parking areas shall use shielded low pressure sodium (LPS) lamps, have a height of 20 feet or less and shall not be visible from any point outside the developed footprint. The lighting shall be positioned and shielded such that the point source of light or any reflective surface of the light fixture is not visible outside of the developed area. The light emanating from such fixtures may not directly or indirectly illuminate the area outside of the developed footprint.

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Appendix A
Project Lighting Restrictions for Conservation of Protected Species (Page 2)

9. Car and other vehicle parking areas shall be designed or positioned such that vehicular headlights do not cast light outside the developed footprint. Native dune vegetation, and/or other ground-level barriers may be used to meet this objective.
10. Minimal temporary lighting during construction should only be used for security and safety. The lights should be completely shielded and low-mounted. Low pressure sodium lights or amber or red LED bulbs shall be used. The lights should not directly or indirectly illuminate any area outside the construction site.
11. Light fixtures using natural gas as the light source shall not be used for fixtures unless they are fully shielded and the lighting is not visible outside the developed footprint.
12. Tinted glass or window film that meets a transmittance value of 45% or less (inside to outside transmittance) shall be used on all windows and glass doors throughout the development.
13. All ceiling-mounted light fixtures in the interior of the condominium units that could be visible from the outside shall minimize the amount of exposed light bulbs.

References:

- Bird, B. L. 2004. Effects of coastal lighting on foraging behavior of beach mice. *Conservation Biology* 18: 1435-1439.
- Bird, B. L. 2002. Effects of predatory risk, vegetation structure, and artificial lighting on the foraging behavior of beach mice. Masters thesis. University of Florida, Gainesville.
- Bowers, M.A and H.D. Smith. 1979. Differential habitat utilization by sexes of the deer mouse, *Peromyscus maniculatus*. *Ecology*, Vol. 60 (5). pp 869-875.
- Brillhart, D.B. and D. W. Kauman. 1991. Influence of illumination and surface structure on space use by prairie deer mice (*Peromyscus maniculatus bairdii*). *Journal of Mammalogy* 72(4):764-768.
- Clarke, J.A. 1983. Moonlight's influence on predator/prey interactions between short-eared owls (*Asio flammeus*) and deer mice (*Peromyscus maniculatus*). *Behavioral Ecology and Sociobiology* 13:205-209.
- Florida Department of Environmental Protection Chapter 62B-34, General Permit for Activities Seaward of the Coastal Construction Control Line, Chapter 62B-55 Model Lighting Ordinance for Marine Turtle Protection.
- Witherington, B.E. and R.E. Martin. 1996. Understanding, assessing, and resolving light-pollution problems on sea turtle nesting beaches. Florida Marine Research Institute Tech. Rep. TR-2. 73 pp.

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Appendix B
Species Plant List for Coastal Dune and Beaches in Escambia County, Florida

Scientific Name	Common Name	Height	Container	Primary & Secondary Dune	Inter-dunal	Scrub dune
Trees						
<i>Magnolia grandiflora</i>	Southern Magnolia	60'-90'*	1gTP,3gTP,D			X
<i>Osmanthus americanus</i>	Wild Olive	70'*	1gTP,3gTP,D			X
<i>Pinus clausa</i>	Sand Pine	20'*	1gFP,3gTP,D			X
<i>Pinus elliottii</i>	Slash Pine	80'-100'*	1gTP,3gTP,D			X
<i>Quercus geminata</i>	Sand Live Oak	30'*	1gTP,3gTP,D			X
<i>Quercus myrtifolia</i>	Myrtle Oak	40'*	1gTP,3gTP,D			X
<i>Quercus virginiana maritima</i>	Sand Live Oak	40'-50'*	1gTP,3gTP,D			X
Medium to Large Shrubs & Small Trees						
<i>Callicarpa americana</i>	Beautyberry	5'	1gTP,TB,D			X
<i>Ilex vomitoria</i>	Yaupon Holly	20'	1gTP,TB,D			X
<i>Iva frutescens</i>	Marsh-Elder	11'	1gTP,TB,D		X	
<i>Rhus copallina</i>	Winged Sumac	10' (30')	1gTP,TB,D		X	X
<i>Serenoa repens</i>	Saw Palmetto	10' (30')	1gTP,TB,D			X
Small Shrubs & Ground Covers						
<i>Schizachyrium</i> (formerly <i>maritimum</i>)	Bluestem		LT,TB	X		X
<i>Asclepias humistrata</i>	Sandhill Milkweed		LT,TB			X
<i>Bignonia capreolata</i>	Cross Vine		LT,TB			X
<i>Cakile constricta</i>	Sea Rocket		LT,TB	X		
<i>Ceratiola ericoides</i>	Seaside Rosemary		LT,TB			X
<i>Chrysoma pauciflosculosa</i>	Seaside Goldenrod		LT,TB	X		X
(T) <i>Chrysopsis gossypina cruiseana</i>	Cruise's Golden Aster		LT,TB	X		X
<i>Conradina canescens</i>	Beach Heather		LT,TB	X		X
<i>Cyperus</i> sp.	Sedge		LT,TB		X	
<i>Heterotheca subaxillaris</i>	Aster (Camphor weed)		LT,TB	X		X
<i>Hydrocotyle bonariensis</i>	Pennywort		LT,TB	X	X	X
<i>Ipomoea pes-caprae</i>	Railroad Vine		LT,TB	X		
<i>Ipomoea imperati</i> (formerly <i>stolonifera</i>)	Beach Morning Glory		LT,TB	X		
<i>Licania michauxii</i>	Gopher Apple		LT,TB			X
<i>Panicum amarum</i>	Beach Grass		LT,TB	X	X	
(E) <i>Polygonella macrophylla</i>	Large-leaved Jointweed		LT,TB			X
<i>Tradescantia ohiensis</i>	Spiderwort		LT,TB		X	X
<i>Uniola paniculata</i>	Sea Oats		LT,TB	X		X

The use of installed irrigation, mulch, regardless if artificial or natural material, and landscape fabric is prohibited.

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T & E = State of Florida protected plant. Planting is strongly encouraged to help recover the species. Make sure the nursery you purchase the plant from is in the Association of Florida Native Plants; they follow all State regulations to grow and sell protected species.

*Trees living in coastal dunes do not reach "normal heights." They tend to be stunted and "pruned" by the wind, sand, and salt spray. Small specimens should be planted in protected areas such as on the landward side of the dunes.

References:

- Moyers, J.E. 1996. Food habits of Gulf coast subspecies of beach mice (*Peromyscus polionotus* spp.). M.S. Thesis, Auburn University, Alabama. 84 pp.
- Clewell, A. F. 1993. Guide to the vascular plants of the Florida panhandle. University Presses of Florida, Florida State University Press, Tallahassee, Florida 605 pp.
- Sneckenberger, S.I. 2001. Factors influencing habitat use by the Alabama beach mouse (*Peromyscus polionotus ammobates*). Master's thesis. Auburn University, Auburn, Alabama.
- Wunderlin, R. P., and B. F. Hansen. 2004. *Atlas of Florida Vascular Plants* (<http://www.plantatlas.usf.edu/>). [S. M. Landry and K. N. Campbell (application development), Florida Center for Community Design and Research.] Institute for Systematic Botany, University of South Florida, Tampa.
- Wunderlin, R.P. 1998. Guide to the vascular plants of Florida. University Presses of Florida, Gainesville, Florida 806 pp.